



US Army Corps
of Engineers
Huntsville Center

Program Manager
(256) 895-1174
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Ordnance and Explosives Formerly Used Defense Sites

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Background

In 1986, Congress established the Defense Environmental Restoration Program (DERP) under Public Laws 99-190 and 99-499. The program goals under DERP are:

- Identify, investigate and cleanup hazardous contaminants.
- Correct the environmental damage (such as detection and disposal of unexploded ordnance)
- Demolition and removal of unsafe buildings and structures

Under DERP are two subprograms, the Installation Restoration (IR) Program — which addresses contamination resulting from past operations at active installations — and the Formerly Used Defense Sites (FUDS) Program. Military Munitions Response Program (MMRP) work is performed under each of these two subprograms, and also under the Base Realignment and Closure (BRAC) program. While the major commands and installations are responsible for executing under BRAC and IR, authority for executing MMRP response actions at FUDS has been delegated to the U.S. Army Corps of Engineers by DoD through Headquarters, Department of the Army.

Center of Expertise/Design Center

The Huntsville Center became the Mandatory Center of Expertise for the Military Munitions Response Program for the U.S. Army Corps of Engineers on April 5, 1990. The CX mission includes developing technical guidance

and performing quality reviews of MMRP projects. Huntsville Center is also a Design Center for MMRP and in this role, plans, manages and executes many of the MMRP projects for FUDS, BRAC, IR and support for others. Huntsville has executed several projects for range maintenance and for clearance of munitions and explosives of



A typical piece of old ordnance

concern (MEC) at active ranges to support construction.

To execute its FUDS program, a team of engineers and other specialists study eligible sites throughout the country to determine if MEC contamination exists. In cooperation with local Corps of Engineers districts, public officials and interested citizens, Huntsville Center leads the phases to identify MEC, determine its potential danger, develop a plan to remove the MEC or reduce its risk and oversee the execution of that plan. The local geographic district serves as the overall project manager for the investigation and response actions, and handles the real estate and public

involvement responsibilities.

Headquarters, U.S. Army Corps of Engineers in Washington, D.C., oversees the FUDS program and provides approval and funding. Huntsville Center's goal at MMRP sites is to reduce in a timely, cost-effective



A FUDS project in Spring Valley, Washington, D.C.

manner, the risk to human health, safety and the environment of hazards which have resulted from past DoD activities. The center applies rigid safety standards and uses contractor personnel highly qualified in unexploded ordnance/ordnance and explosive waste (OEW) removal. Center personnel who oversee safety have specialized military training and extensive specialized experience in OEW removal.

The Response Process

The Corps executes MMRP response actions in the following described phases:

- **Preliminary Assessment (PA).** This is the initial phase performed for FUDS to determine property and project eligibility. This stage includes review of historical records, development of Archive Search Reports (ASR), site visits and development of an Inventory Project Report, which recommends further action, if required.

- **Site Inspection (SI).** During this phase, the historical use of the site is reviewed. Limited investigation of the site is performed to include samples for both MEC and munitions constituents. These records include maps, drawings, aerial photographs and visual inspection of the site. The results of this phase are documented in a site inspection report. If the SI report confirms an ordnance problem, the Corps proceeds to the next phase of the response process.

- **Remedial Investigation/Feasibility Study (RI/FS).** The purpose of the RI/FS is to identify the most appropriate response action to address an MEC or MC risk at a project site. Integral parts of the RI/FS include a complete site characterization in which the area, depth and density of MEC and MC contamination is estimated; a risk assessment of MEC hazards present at the site; and an evaluation of potential response alternatives. The selected alternative is documented in a decision document.

- **Remedial Design Action.** A statement of work, work plan and explosives safety plan for the selected alternative comprise the major elements of a removal design. Once these documents are approved, the contractor begins work to perform the removal action/remedial action.

The phases described above are followed during the non-time critical removal process. If an imminent hazard is discovered during any phase, a time-critical removal action may be initiated to address the immediate hazard.

Potential OE Sites

- 1,691 Formerly Used Defense Sites
- 1,329 sites required preliminary investigation - Archive Search Report (ASR)
- 1,280 ASRs completed
- 600-700 sites expected to be contaminated with unexploded ordnance